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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/475,696	12/30/1999	DARRYL L. DEFREESE	A-6307	6730

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EXAMINER	
PICH, PONNOREAY	
ART UNIT	PAPER NUMBER
2435	

NOTIFICATION DATE	DELIVERY MODE
04/09/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOmail@sciatl.com

Office Action Summary	Application No.	Applicant(s)	
	09/475,696	DEFREESE ET AL.	
	Examiner	Art Unit	
	PONNOREAY PICH	2435	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 December 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *85-105* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *85-105* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date. _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

In view of the appeal brief filed on 12/31/08, PROSECUTION IS HEREBY REOPENED by withdrawing the Final Office Action mailed on 7/7/09. New grounds of rejections are set forth below. These new grounds of rejections are made in response to the amendments made by applicant on 4/14/08 and 7/7/08. The amendment made on 4/14/08 cancelled all previously pending claims for which a Non-Final Office Action on merit and already been received and submitted new claims for consideration. The amendment made on 7/7/08 cancelled claim 106. Claims 85-105 were not amended in the amendment submitted on 7/7/08, thus are the same as the version submitted on 4/14/08. **All new grounds of rejections for claims 85-105 made below are in response to the amendments made by applicant on 4/14/08 and as such, this Office action is made Final.**

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below.

Examiner's remarks

Before proceeding with the rejection of the claims, the examiner would first like to note that as defined by The American Heritage College Dictionary, Fourth Edition, a "table" is either "an orderly list" or "an orderly arrangement of data". With respect to the claims, it is noted that the claims recite an "entitlement unit table". An entitlement unit table is not a standard term in the art and as such the broadest, reasonable interpretation of the term will be used by the Office. Any orderly list or orderly arrangement of data comprising an identifier of a first service and one or more entitlement unit numbers (EUNs) that each uniquely identify a service package that comprises one or more services available to the user, the one or more services for each of the one or more EUNs including the first service as recited in the claims will be considered an "entitlement unit table".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 95 is rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell et al (US 4,862,268) in view of Hayes (4,718,107).

Claim 95:

Campbell discloses:

1. A tuner (Fig 6, tuner 106).
2. A processor (Fig 6, converter control logic unit 104) configured to control the tuner (Fig 6, tuner 108), the processor configured to:
    a. Receiving an entitlement unit table (EUT), the EUT comprising an identifier of a first service and one or more entitlement unit numbers (EUNs) that each uniquely identify a service package that comprises one or more services available to the user, the one or more services for each of the one or more EUNs including the first service (Fig 11 and col 12, lines 60-64). *The data transmitted seen in Figure 11 can be considered an EUT since it is an orderly arrangement of data comprising an identifier of a first service and one or more EUNs that each uniquely identify a service package that comprises one or more services available to the user, the one or more services for each of the one or more EUNs including the first service. The tier code 202 is at least one field that can be considered an EUN and as discussed in column 13, lines 9-11, the tier code defines the level of access required for the program in question and is used to determine whether a particular program can legally be accessed by a subscriber. Channel number 216 is at least one field that can be*

considered an identifier of a first service. Note that other fields of the data seen in Figure 11 can also be interpreted to be EUNs and a first identifier.

b. Responsive to the user selection of the first service, determining whether the at least one of the one or more EUNs matches an authorized EUN (Fig 12, steps 310, 320, 322, and 324; col 12, lines 16-15; col 15, lines 7-66).

c. Tuning to the selected first service (Fig 12, steps 310 and 316).

Campbell does not explicitly disclose the tuning is done responsive to determining that there is a match between the one or more EUNs and the authorized EUN. However, first recall that the tier code 202 seen in Figure 11 can be considered an EUN and is used to determine whether or not to allow a user access to one or more programs/services. Further, Hayes discloses receiving a user's channel selection (i.e. selection of a first service), determining whether the user should be allowed to access the channel or not, and responsive to this determination, tuning to the selected channel (col 5, lines 6-21).

In light of Hayes's teachings, it would have been obvious to one skilled in the art at the time applicant's invention was made, to modify Campbell's teachings such that after a user selects a first service, rather than tuning to the channel which provides the first service, the tuning is done in response to determining there is a match between the one or more EUNs and the authorized EUN. One skilled would have been motivated to do so as a matter of design choice--whether one tunes to a selected first service before or after determining that there is a match between one or more EUNs and the

authorized EUN does not really matter as long as the content of the first service is not descrambled except for authorized users; the end result of content protection is the same. Further, substituting the elements in Campbell's invention which decides when the tuning actually occurs based on Hayes's teachings in the manner discussed is nothing more than simple substitution of one known element for another to achieve the predictable result of not tuning unless the one or more EUNs match an authorized EUN.

Claims 85, 89, and 105 are rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell et al (US 4,862,268) in view of Hayes (4,718,107) in further view of Urakoshi et al (US 6,067,564).

Claim 85:

Much of the limitations recited in claim 85 are substantially similar to what is recited in claim 95 and these limitations are rejected for similar reasons discussed above in the rejection of claim 95. Claim 85 further requires that the user selection of the first service if done from an electronic program guide (EPG). This limitation is disclosed by Urakoshi (col 7, lines 11-15 and col 8, lines 2-6).

At the time applicant's invention was made, it would have been obvious to one skilled in the art to modify Campbell and Hayes combination's invention using Urakoshi's teachings such that the user selects a first service from an EPG. One skilled in the art would have been motivated to allow a user to select services from a program guide because as disclosed by Urakoshi, use of a program guide would allow a user to

recognize at a glace which programs can be viewed and which cannot at current settings and understand why they are so presented (col 8, lines 2-6). Note that use of a program guide to select services is also obvious because it is applying a known technique to a known device ready for improvement to yield predictable results.

Claim 89:

Campbell further discloses responsive to the tuning, determining whether the selected service is an authorized service (Figs 12 and 17 and col 15, lines 16-66).

Claim 105:

Campbell does not explicitly disclose the processor is further configured to provide an electronic program guide (EPG) that enables the user to select the first service. However, this limitation is disclosed by Urakoshi (col 7, lines 11-15 and col 8, lines 2-6).

At the time applicant's invention was made, it would have been obvious to one skilled in the art to modify Campbell's invention such that processor is further configured to provide an electronic program guide that enables the user to select the first service. The rationales for why it would have been obvious to one of ordinary skill are the same as what was discussed in claim 85.

Claims 86-87 are rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell et al (US 4,862,268) in view of Hayes (4,718,107) in further view of Urakoshi

et al (US 6,067,564) in further view of applicant's admitted prior art (herein referred to as AAPA) as discussed in the specification of the current application.

Claim 86:

Campbell does not explicitly disclose receiving the EUT in an encrypted format. However, the EUT of Campbell contains tier data (see Fig 11) and as disclosed by AAPA, such data is often encrypted by the headend and received in an encrypted format (p2, lines 10-18). As such, it would have been obvious to one of ordinary skill in the art to further modify Campbell's invention such that the EUT was received in an encrypted format. One skilled would have been motivated to do so because data such as tier data in Campbell's EUT is often received in encrypted format in prior art conditional access systems.

Claim 87:

Campbell does not explicitly disclose wherein receiving comprises receiving the EUT in a nonencrypted format. However, the EUT of Campbell contains tier data (see Fig 11) and as disclosed by AAPA, such data is often received in encrypted format. This implies that at times, such data is received in nonencrypted format since AAPA did not state that such data is always received in encrypted format. As such, it would have been obvious to one skilled in the art to modify Campbell's invention such that the EUT was received in nonencrypted format. One skilled would have been motivated to do as a matter of design choice. As discussed by AAPA, certain data is received in either encrypted or nonencrypted format.

Claims 88 and 90-94 are rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell et al (US 4,862,268) in view of Hayes (4,718,107) in further view of Urakoshi et al (US 6,067,564) in further view of Wasilewski (US 5,420,866).

Claim 88:

Campbell does not explicitly disclose wherein receiving comprises receiving the EUT from an MPEG-compliant transport stream. However, Wasilewski discloses that receiving conditional access data from MPEG-compliant transport streams was well known in the art at the time applicant's invention was made (col 4, lines 51-66). Campbell's EUT contains conditional access data (Fig 11). At the time applicant's invention was made, it would have been obvious to one skilled in the art to modify Campbell's invention such that the EUT was received from an MPEG-compliant transport stream. One skilled would have been motivated to do so because Wasilewski discloses that MPEG was adopted as a standard for transporting one or more data streams (col 1, lines 14-18). It would also have been obvious to one skilled in the art to modify Campbell's invention to receive the EUT from an MPEG-compliant transport stream because it is simple substitution of one known element for another to obtain predictable results. In this case, one is merely substituting the type of stream used the transport the EUT from the headend to the receiver.

Claim 90:

Campbell does not explicitly disclose wherein determining whether the selected first service is an authorized service comprises: receiving an encrypted entitlement

control message (ECM); and decrypting the encrypted ECM to reveal encrypted control words and the one or more EUNs, the encrypted control words corresponding to elementary streams of the selected first service and the one or more EUNs.

However, Wasilewski discloses a conditional access system which uses encrypted ECM to transport control words and other conditional access data from a headend to a receiver; the ECM disclosed by Wasilewski is received and decrypted to reveal encrypted control words and one or more conditional access data; the encrypted control words corresponding to the elementary stream of a first selected service and the one or more conditional access data (col 4, lines 7-25; col 6, lines 17-26; and col 9, lines 37-col 10, line 28). Note that the EUNs of Campbell's invention contain conditional access data (Fig 11).

At the time applicant's invention was made, it would have been obvious to one skilled in the art to modify Campbell's invention in light of Wasilewski's teachings such that determining whether the selected first service is an authorized service comprises: receiving an ECM; and decrypting the encrypted ECM to reveal encrypted control words and the one or more EUNs, the encrypted control words corresponding to elementary streams of the selected first service and the one or more EUNs. One skilled would have been motivated to modify Campbell's invention using Wasilewski's teachings in the manner discussed because use of control words as per Wasilewski's teachings to secure services would further ensure that only authorized subscribers can have access to specific services. One skilled would have been motivated to transport the EUN in

ECM because Wasilewski discloses that the format of an ECM is not dictated, thus is open to design preferences (col 4, lines 26-27).

Claim 91:

Campbell further discloses wherein determining whether the selected first service is an authorized first service further comprises: determining whether the at least one of the one or more EUNs matches an authorized EUN (Figs 12 and 17; col 12, lines 16-15; and col 15, lines 7-66).

Claim 92:

As per clam 92, the limitation of decrypting the encrypted control words responsive to determining that there is a match between the one or more EUNs and the authorized EUN is obvious to the combined teachings of Campbell and Wasilewski. As seen in Figures 12 and 17 of Campbell, descrambling is only done if there is a match between the one or more EUNs and the authorized EUN. As per Wasilewski's teachings, the encrypted control words are used for descrambling the services (Fig 6 and Fig 8A and col 14, lines 9-20). As such, a person of ordinary skill having common sense and ordinary creativity would recognize that since descrambling of a service is only done if there is a match between the one or more EUNs and the authorized EUN, there is no need to decrypt the encrypted control word except if there is a match. One of ordinary skill in the art would have been motivated to only decrypt the encrypted control word if there is a match between the one or more EUNs and the authorized EUN to avoid unnecessary steps being carried out and to avoid needlessly exposing the control words.

Claim 93:

Wasilewski further discloses decrypting the elementary streams of the selected first service based on the decrypted control words (Fig 6 and Fig 8A and col 14, lines 9-20).

Claim 94:

Wasilewski further discloses wherein receiving the encrypted ECM comprises receiving the encrypted ECM from an MPEG-compliant transport stream (col 4, lines 7-12).

Claims 96-104 are rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell et al (US 4,862,268) in view of Hayes (4,718,107) in further view of applicant's admitted prior art (herein referred to as AAPA) as discussed in the specification of the current application.

Claims 96-97:

Claims 96-97 recites the processor is further configured to perform steps of a method similar to what is recited in claims 86-87 respectively, thus claims 96-97 are rejected over the additional teachings of AAPA for much the same reasons discussed in the rejection of claims 86-87 respectively.

Claims 98-104 are rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell et al (US 4,862,268) in view of Hayes (4,718,107) in further view of Wasilewski (US 5,420,866).

Claims 98-104:

Claims 98-104 recites the processor is further configured to perform steps of a method similar to what is recited in claims 88-94 respectively, thus claims 98-104 are rejected over the additional teachings of Wasilewski for much the same reasons discussed in the rejection of claims 88-94 respectively.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PONNOREAY PICH whose telephone number is (571)272-7962. The examiner can normally be reached on 9:00am-4:30pm Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ponnoreay Pich/
Examiner, Art Unit 2435
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